

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**AIR QUALITY PERMIT**

**Issued under 401 KAR 52:040, State-Origin Permits**

**Permittee Name: Blue Gem Mining Company, Inc.  
Mailing Address: 108 S. David Lane, Knoxville, Tennessee 37922-3803**

**is authorized to construct and operate a coal crushing plant**


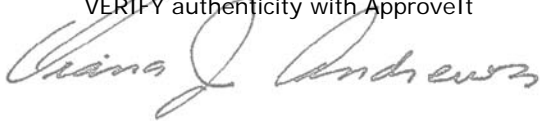
**Source Name: Blue Gem Plant  
Mailing Address: Same as above  
Source Location: P.O. Box 103, 8555 E. Hwy 904, Nevisdale, Kentucky**

**Permit Number: S-01-080 (Revised)  
AI ID #: 35758  
Activity ID#: APE20040002  
Permit Type: Construction/Operating  
KYEIS ID #: 21-235-00015**

**Regional Office: London Regional Office  
875 S. Main Street  
London, KY 40741  
(606) 878-0157**

**County: Whitley**

**Issuance Date: August 29, 2001  
Revision Date: September 14, 2005  
Expiration Date: August 29, 2011**

E-Signed by Diana Andrews  
VERIFY authenticity with ApproveIt   


**John S. Lyons, Director  
Division for Air Quality**

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application which was determined to be complete on June 2, 2005, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify an affected facility without first having submitted a complete application and receiving a permit for the planned activity from the Division, except as provided in this permit or in Regulation 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agency.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- 05    (-)            **Stockpile (Clean Steam)**
- (-)            **Stockpile (Raw Steam)**
- (-)            **Stockpile (Raw Stoker)**
- (-)            **Stockpile (1/2" x 1/8" Mini-Stoker)**
- (-)            **Stockpile (1/2" x 1/8" Mini-Stoker)**
- (-)            **Stockpile (1/2" x 1/8" Mini-Stoker)**
- 06    (-)            **Haul Road and Yard Area**
- 08    (-)            **Refuse Stockpile**

### **Applicable Regulations:**

State Regulation 401 KAR 63:010, Fugitive emissions, applies to each of the affected facilities listed above.

### **1. Operating Limitations:**

N/A

### **2. Emission Limitations:**

a) The materials processed at each affected facility listed above shall be controlled with wet suppression, enclosures, and/or dust collection equipment so as to comply with the requirements specified in State Regulation 401 KAR 63:010, Fugitive emissions, Section 3. Standards for fugitive emissions.

b) Pursuant to State Regulation 401 KAR 63:010, Section 3 (1), no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

1. Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
2. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **2. Emission Limitations: (Continued)**

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
5. The maintenance of paved roadways in a clean condition;
6. The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.

c) Pursuant to State Regulation 401 KAR 63:010, Section 3 (2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

d) Pursuant to State Regulation 401 KAR 63:010, Section 3 (3), when dust, fumes, gases, mist, odorous mater, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the Secretary may order that the building or equipment in which processing, handling, and storage are done be tightly closed and ventilated in such a way that all air, gases, and air or airborne materials leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.

e) Pursuant to State Regulation 401 KAR 63:010, Section 4, Additional Requirements, in addition to the requirements of Section 3 of this regulation, the following shall apply:

1. Pursuant to State Regulation 401 KAR 63:010, Section 4 (1), open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered at all times when in motion.
2. Pursuant to State Regulation 401 KAR 63:010, Section 4 (4), no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

### **Compliance Demonstration Method:**

See Section C, General Condition F.1.

### **3. Testing Requirements:**

N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**4. Monitoring Requirements:**

See Section C, General Condition F.1.

**5. Recordkeeping Requirements:**

See Section C, General Conditions B.1., B.2., and F.1.

**6. Reporting Requirements:**

See Section C, General Conditions C.1, C.2, C.3., and F.2.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**RAW CLEAN COAL TO LOADOUT:**

- 01      (-)            Receiving Hopper (Raw Steam Truck Dump)**
- (-)            Primary Crusher (Hammermill)**  
**(Maximum Rated Capacity – 1000 tons/hour)**
- (-)            Conveyor and Transfer Points (36” Clean Coal Belt)**
- (-)            Conveyor and Transfer Points (36” Clean Coal Crossover Belt)**
- (-)            Conveyor and Transfer Points (36” Clean Coal Stacker Belt)**
- (-)            Conveyor and Transfer Points (60” Unit Train Loadout Belt)**
- (-)            Unit Train Loadout**

**CLEAN COAL THROUGH PREPARTION PLANT TO LOADOUT:**

- 02      (-)            Receiving Hopper (Raw Coal Truck Dump)**
- (-)            Conveyor and Transfer Points (42” Raw Coal Stacker Belt)**
- (-)            Conveyor and Transfer Points (36” Raw Steam Reclaim Belt)**
- (-)            Scalping Screen**  
**(Maximum Rated Capacity – 500 tons/hour)**
- (-)            Conveyor and Transfer Points (36” Rock Belt)**
- (-)            Rock Bunker**
- (-)            Truck Loadout (From Rock Bunker)**
- (-)            Conveyor and Transfer Points (30” Raw Plant Feed Belt)**
- (-)            Preparation Plant (Wet Process – No Emissions)**
- (-)            Conveyor and Transfer Points (30” Clean Coal Collecting Belt)**

**STOCKER COAL FACILITY:**

- 03      (-)            Receiving Hopper (Raw Stoker Truck Dump)**
- (-)            Conveyor and Transfer Points (48” Crusher Feed Belt)**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- |    |     |   |
|----|-----|---|
| 03 | (-) | <b>Primary Crusher (4 Roll)<br/>(Maximum Rated Capacity – 300 tons/hour)</b>  |
|    | (-) | <b>Conveyor and Transfer Points (36” Gundlach Transfer Belt)</b>  |
|    | (-) | <b>Conveyor and Transfer Points (36” Pre-Screen Feed Belt)</b>  |
|    | (-) | <b>Screen (Stoker Pre-Screener 1/8” x 0” Fines to Clean Coal Crossover Belt) (Maximum Rated Capacity – 200 tons/hour)</b> |
|    | (-) | <b>Conveyor and Transfer Points (36” Raw Stoker Stacker Belt)</b>   |
|    | (-) | <b>Conveyor and Transfer Points (30” Raw Stoker Reclaim Belt From Raw Stoker Coal Tunnel to Raw Plant Feed Belt)</b>      |
|    | (-) | <b>Conveyor and Transfer Points (30” Stoker screen Feed Belt From Preparation Plant to Stoker Sizing Screen)</b>          |
|    | (-) | <b>Screen (Stoker Sizing)<br/>(Maximum Rated Capacity – 200 tons/hour)</b>  |
|    | (-) | <b>Conveyor and Transfer Points (30” Stoker Transfer Belt)</b>  |
|    | (-) | <b>Conveyor and Transfer Points (36” Stoker Transfer Belt)</b>  |
|    | (-) | <b>Railcar Loadout (Stoker Loadout)</b>   |
|    | (-) | <b>Conveyor and Transfer Points (30” Fine Stoker Transfer Belt From Stoker Sizing Screens to Preparation Plant)</b>       |
|    | (-) | <b>Screen (Mini-Stoker Sizing) (Wet Process – No Emissions)<br/>(Maximum Rated Capacity – 200 tons/hour)</b>              |
|    | (-) | <b>Conveyor and Transfer Points (24” Mini-Stoker Transfer Belt)</b>   |
|    | (-) | <b>Conveyor and Transfer Points (24” Mini-Stoker Transfer Belt)</b>   |

**REFUSE OPERATION:**

- |    |     |   |
|----|-----|---|
| 04 | (-) | Conveyor and Transfer Points (30” Refuse Belt From Prep Plant to Refuse Bin) (Wet Process – No Emissions) |
|    | (-) | Storage Bin (Refuse) (Wet Process – No Emissions)   |
|    | (-) | Truck Loadout (From Refuse Belt) (Wet Process – No Emissions)   |
| 07 | (-) | Conveyor and Transfer Points (36” Belt from Refuse Bin to Stockpile) (Wet Process – No Emissions)         |

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****ADDITIONS TO SOURCE:**

- 09      (-)                      **Primary Crusher (Accelerator/Stoker Sizer)**  
   **(Maximum Rated Capacity – 100 tons/hour)**

**Applicable Regulations:**

State Regulation 401 KAR 60:005, Standards of performance for new stationary sources, which incorporates by reference 40 CFR 60.250 (40 CFR 60, Subpart Y), applies to each of the affected facilities listed above.

1.      **Operating Limitations:**

N/A

2.      **Emission Limitations:**

Fugitive emissions from the three truck dump receiving hoppers, emission point 01 (-), 02 (-), and 03 (-); the scalping screen, emission point 02 (-); the stoker pre-screener, emission point 03 (-); the two sizing screens, emission points 03 (-) and (-); the three primary crushers, emission points 01 (-), 03 (-), and 09 (-); the twenty-two conveyor and transfer points, emission points 01 (-), (-), (-), and (-), 02 (-), (-), (-), (-), and (-), 03 (-), (-), (-), (-), (-), (-), (-), (-), (-), (-), and (-), 04 (-), and 07 (-); the two storage bins, emission points 02 (-) and 04 (-); the two truck loadouts, emission points 02 (-) and 04 (-); the two train loadouts, emission points 01 (-) and 03 (-); and the Prep Plant, emission point 02 (-); shall not exhibit greater than twenty percent (20%) opacity, each, as specified in 40 CFR 60.252(c).

**Compliance Demonstration Method:**

In determining compliance with the opacity standards as listed above, the owner or operator shall use Method 9 and the procedures as described in 40 CFR 60.11 and 40 CFR 60.675(c), except for wet processes, which are exempt from Method 9, as specified in 40 CFR 60.675 (h)(1) and (2).

3.      **Testing Requirements:**

See Section C, General Condition G.3.

4.      **Monitoring Requirements:**

See Section C, General Condition F.1.

5.      **Recordkeeping Requirements:**

See Section C, General Conditions B.1., B.2., and F.1.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Reporting Requirements:**

See Section C, General Conditions C.1, C.2, C.3., F.2., and G.2.

## SECTION C - GENERAL CONDITIONS

### A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of Regulation 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue, August 29, 2001. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 11]
4. Pursuant to materials incorporated by reference by 401 KAR 52:040, the permit contained herein may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 4 and 5]
5. The permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:040 Section 11(3)]
7. The permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in State Regulation 401 KAR 50:038, Air emissions fee. Source shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20.
8. All previously issued permits to this source at this location are hereby null and void.

## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

### **B. Recordkeeping Requirements**

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Material incorporated by reference by 401 KAR 52:040, Section 1b, IV. 2) and 401 KAR 52:040 Section 3(1)(f)]
2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to State Regulation 401 KAR 52:040, Section 21.

### **C. Reporting Requirements**

1.
  - a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's London Regional Office concerning startups, shutdowns, or malfunctions as follows:
    1. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
    2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
  - b. In accordance with the provisions of Material incorporated by reference by 401 KAR 52:040, Section 1b, V. 3), the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1 a) above), the probable cause of the deviation, and corrective or preventive measures taken; to the Division for Air Quality's London Regional Office.
2. The permittee shall furnish information requested by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 6].
3. Summary reports of any monitoring required by this permit shall be submitted to the Division's London Regional Office at least every six (6) months during the life of this permit. The summary reports are due January 30<sup>th</sup> and July 30<sup>th</sup> of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21. All deviations from permit requirements shall be clearly identified in the reports.

## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

### **D. Inspections**

1. In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency;
  - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

### **E. Emergencies/Enforcement Provisions**

1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Material incorporated by reference by 401 KAR 52:040, Section 1a, 3].
2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement.
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

**SECTION C - GENERAL CONDITIONS (CONTINUED)****F. Compliance**

1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
  - a. Pursuant to State Regulation 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by State Regulation 401 KAR 50:055, Section 1.
  - b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and non routine maintenance performed on each control device. Daily observations are required during daylight hours of all operations, control equipment and any visible emissions to determine whether conditions appear to be either normal or abnormal. If the operations, controls and/or emissions appear to be abnormal, the permittee must then comply with the requirements of Section C – General Conditions, C.1.b., of this permit.
  - c. A log of the monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program (spread sheets), calculations or performance tests as may be specified by the Division.
2. Pursuant to 401 KAR 52:040, Section 19, the permittee shall annually complete and return a Compliance Certification Form (DEP 7007CC) to the Division's London Regional Office in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period; and
  - e. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality London Regional Office 875 S. Main Street London, KY 40741	Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601
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3. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all applicable requirements for:
  - a. Applicable requirements included and specifically identified in the permit; or
  - b. Non-applicable requirements expressly identified in this permit.

**SECTION C - GENERAL CONDITIONS (CONTINUED)****G. New Construction Requirements:**

1. Pursuant to 401 KAR 52:040, Section 12(3), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon a written request, the cabinet may extend these time periods if the source shows good cause.
2. Pursuant to 401 KAR 52:040, Section 12(4)(a) and 401 KAR 59:005, General provisions, Section 3(1), within 30 days following construction commencement, within 15 days following start-up and attainment of maximum production rate, or within 15 days following the issuance date of this permit, whichever is later, the owner and/or operator of the affected facilities specified on this permit shall furnish to the Division's London Regional Office, with a copy to the Division's Frankfort Central Office, the following:
  - a. Date when construction commenced, (See General Condition G.1).
  - b. Start-up date of each of the affected facilities listed on this permit.
  - c. Date when maximum production rate was achieved, (See General Condition G.3.b).
  - d. Summary reports, as referenced in Section C, C.3., of any monitoring required by this permit, for emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.
  - e. The annual compliance certification, as referenced in Section C, F.2., for an emissions unit that was still under construction or which had not commenced operation at the end of the 12-month period covered by the compliance certification, shall indicate that the unit was under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
3.
  - a. Pursuant to 401 KAR 59:005, General provisions, Section 2(1), this permit shall allow operation for compliance demonstration of the affected facilities listed herein. However, within 60 days after the issuance date of this permit or the date of achieving the maximum production rate at which the affected facilities will be operated, whichever is later, but no later than 180 days after initial start-up of such facilities, or the issuance date of this permit, whichever is later, the owner or operator shall demonstrate compliance to a duly authorized representative of the Division.
  - b. Pursuant to 401 KAR 59:005, General provisions, Section 3(1)(b), unless notification and justification to the contrary are received by this Division, the date of achieving the maximum production rate at which the affected facilities will be operated shall be deemed to be 30 days after initial start-up.
4. Operation of the affected facilities authorized by this permit shall not commence until compliance with applicable standards specified herein has been demonstrated in accordance with the requirements of 401 KAR 52:040, Section 12(4)(b).